

NEVADA NATIONAL SECURITY SITE CELEBRATES 65 YEARS



THINGS YOU NEVER KNEW ABOUT THE NEVADA NATIONAL SECURITY SITE

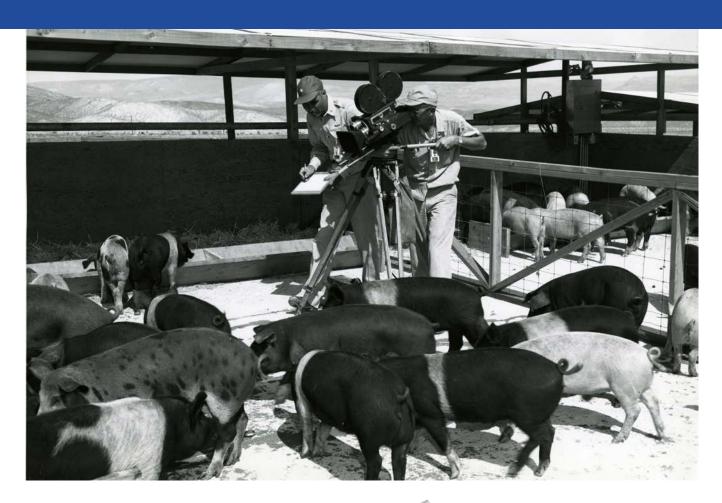


The Las Vegas Bombing and Gunnery Range, 65 miles northwest of Las Vegas, was selected as the Nevada Test Site (NTS, now the Nevada National Security Site) for its remote location. The site was large enough that unanticipated winds would likely not drop fallout on any nearby town, and the surrounding towns were sparsely populated. South of the range, a government-owned airfield and housing for more than 300 people already existed.

- The actual nuclear devices being tested at NTS were classified, so scientists assigned each test a nickname that had to be approved by the Office of Military Applications. Early names used the military phonetic alphabet (Able, Baker), but as the number of tests outgrew the alphabet, names included nature terms (Antler, Feather), Native American tribes (Cherokee, Zuni), famous scientists (Galileo, Newton), and New Mexico towns (Bernalillo, Santa Fe).
- Data collection on nuclear tests went beyond the obvious—yield. One objective for aboveground (atmospheric) nuclear test Annie was to determine what would happen to a typical American home in the event of an atomic blast. A two-story colonial house, located 3,500 feet from the 16-kiloton shot, was more than 90 percent destroyed. Before and after photos of the interior—including clothed mannequins—were printed in the Las Vegas Review Journal with the following statement: "These mannequins could have been real people, in fact, they could have been you."





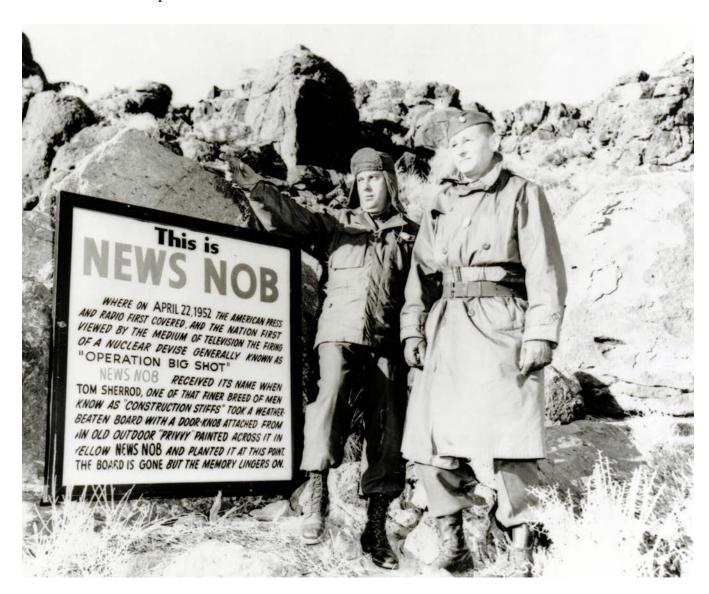


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In 1957, the test site was home to 1,200 pigs that lived in several pens collectively called the Pork Sheraton. The sows were used in several tests such as Encore, during which 44 anesthetized pigs were clothed in various fabrics and exposed at varying distances to ground zero. The idea was to see how fabrics, including military uniforms, reacted to heat generated by a nuclear explosion. Prior to the shot, the animals, which had been purchased for \$25 a head as piglets, grew so rapidly that seamstresses from Las Vegas were called in to modify their outfits.

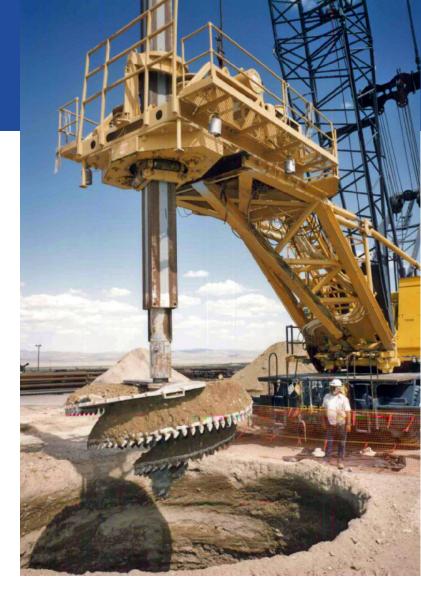


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- The Department of Agriculture and the U.S. Forest Service hoped to study the effects of a nuclear explosion on a forested area—but no forests existed on the NTS. So, in 1953, 145 ponderosa pine trees were brought in from a nearby canyon, stood upright, and cemented into place 6,500 feet away from ground zero of the Encore test. The heat of the explosion caused the model forest to catch fire, and then the blast wave caused the trees to topple.
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- Starting with Operation Big Shot on April 22, 1952, photographers and journalists often observed atmospheric tests from a craggy mound of volcanic tuff on the edge of Yucca Lake. In the 1950s, a construction worker took a weather-beaten board from an old outhouse—with a yellow doorknob attached to it—and painted "This is News Nob" across the wood. The name stuck, and during testing days, News Nob was one of the most photographed and reported-from places in the world.

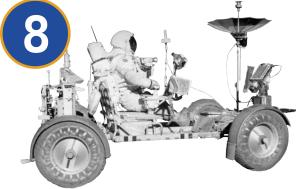




Between 1961 and 1992, 828 underground nuclear tests were conducted at NTS, most of them deep inside specially drilled vertical shafts (see "Nuclear Test Readiness," page 8). A shaft usually took up to 12 weeks to drill, depending on its location, depth (500–4,000 feet), and diameter (74–120 inches). A nuclear device was lowered into the shaft on a rack and was then buried to prevent radioactive debris and gas from escaping to the surface. Drilling a "big hole" cost an average of \$1.5 million in the 1980s.







NTS's lunar-like landscape was an ideal location for astronauts to train. Schooner Crater, in the extreme northwest portion of the test site, was visited by Apollo 14, 16, and 17 astronauts. Schooner was formed by a 30-kiloton underground shot that was part of the Plowshare tests in December 1968. At 200 feet deep and 725 feet wide, Schooner is the second-largest crater at NTS.



From 1964–1981, the Environmental Protection Agency (EPA) managed a 36-acre farm on the test site. Plant and soil studies evaluated the uptake of pollutants in farm-grown vegetables and from the forage eaten by 100 Hereford beef cattle. Researchers found no disease or tissue damage to the cattle resulting from radiation exposure (here, an EPA employee takes a food sample from a fistulated steer). Nuclear testing was sometimes delayed so that the 30 Holstein dairy cows could be milked on schedule.



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The town of Mercury, 65 miles northwest of Las Vegas, was the social hub of the testing site and included amenities such as an eight-lane bowling alley, an Olympic-size swimming pool, a library, and a movie theater. The Steak House was the best restaurant on site, according to many.





"When there was time to relax, test crew members did so with the same exuberance they demonstrated on the job," remembers Los Alamos Test Director Ron Cosimi. "I think all who spent time at the Site will remember the raucous poker games in the dorms, the wild softball games, the exploring of the nearby canyons and mountains, the beer drinking at the bowling alley, the long nights at the Mercury Steak House, and the innumerable pranks.

You could say we were a family." +

~Whitney J. Spivey